TABLE 45

Use of robotics technology, by industry: 2020

(Number and percent)

| Industry | NAICS code | Companies (number) | In use | In testing, but not in use | Not in use nor testing | Don't know | Did not answer |
|--|-------------------------|-----------------------|--------|-------------------------------------|------------------------|---------------|-------------------|
| All industries | 11, 21–23, 31–33, 42–81 | 4,865,616 | 0.9 | 0.3 | 85.8 | 12.6 | 0.3 |
| Manufacturing industries | 31-33 | 213,833 | 6.1 | 1.3 | 81.8 | 10.3 | 0.5 |
| Food | 311 | 18,385 | 3.2 | 0.6 | 84.6 | 11.2 | 0.4 |
| Beverage and tobacco products | 312 | 9,314 | 2.1 | 0.3 | 89.9 | 7.1 | 0.7 r |
| Textile, apparel, and leather products | 313-16 | 9,850 | 1.2 | 0.8 | r 86.1 | 10.5 | 1.5 r |
| Wood products | 321 | 10,237 | 2.9 | 1.1 | r 84.0 | 11.7 | 0.2 r |
| Paper | 322 | 1,907 | 3.9 | 1.1 | r 86.3 | 8.2 | 0.5 r |
| Printing and related support activities | 323 | 20,357 | 1.2 | 0.1 | r 88.1 | 10.0 | 0.6 r |
| Petroleum and coal products | 324 | 463 | 2.2 | 0.9 | 77.1 | 19.9 | 0.0 |
| Chemicals | 325 | 8,095 | 4.7 | 0.7 | 85.3 | 8.8 | 0.5 r |
| Pesticide, fertilizer, and other agricultural chemicals | 3253 | 514 | 16.5 | 0.0 | 70.4 | 13.0 | r 0.0 |
| Pharmaceuticals and medicines | 3254 | 1,417 | 6.7 | 1.7 | 79.0 | 11.9 | 0.8 r |
| Soap, cleaning compound, and toilet preparation | 3256 | 1,807 | 1.4 | 0.3 | 87.6 | 10.4 | 0.2 r |
| Other chemicals | other 325 | 4,357 | 4.1 | 0.6 | 88.1 | 6.7 | 0.6 r |
| Plastics and rubber products | 326 | 7,478 | 12.6 | 2.9 | 73.1 | 11.4 | 0.1 |
| Nonmetallic mineral products | 327 | 7,300 | 4.1 | 0.5 | r 85.3 | 10.0 | 0.1 r |
| Primary metals | 331 | 2,394 | 12.9 | 2.3 | 68.5 | 15.9 | 0.3 r |
| Fabricated metal products | 332 | 46,992 | 8.5 | 2.2 | 78.5 | 10.3 | 0.6 |
| Machinery | 333 | 18,052 | 12.4 | 2.6 | 73.3 | 11.5 | 0.2 |
| Computer and electronic products | 334 | 8,732 | 8.3 | 2.2 | 78.9 | 10.2 | 0.4 r |
| Communications equipment | 3342 | 836 | 4.3 r | 3.7 | r 86.1 | 5.6 | 0.2 |
| Semiconductor and other electronic components | 3344 | 2,773 | 12.4 | 2.3 | 72.2 | 12.9 | 0.1 r |
| Navigational, measuring, electromedical, and control instruments | 3345 | 3,753 | 7.4 | 2.2 | 79.9 | 9.8 | 0.7 r |
| Other computer and electronic products | other 334 | 1,369 | 5.1 | 1.2 | 85.5 | 8.0 | 0.1 |
| Electrical equipment, appliances, and components | 335 | 4,064 | 7.7 | 1.4 | 82.3 | 8.3 | 0.3 |
| Transportation equipment | 336 | 7,786 | 11.0 | 1.6 | r 79.5 | 7.7 | 0.3 |
| Automobiles, bodies, trailers, and parts | 3361-63 | 5,054 | 12.6 | 2.0 | r 77.1 | 8.0 | 0.3 |
| Aerospace products and parts | 3364 | 994 | 12.0 | 2.1 | r 77.4 | 8.2 | 0.3 r |
| Other transportation | other 336 | 1,738 | 5.5 | 0.3 | 87.6 | 6.4 | 0.2 r |
| Furniture and related products | 337 | 12,594 | 4.0 | 0.3 | r 85.5 | 9.8 | 0.4 r |
| Miscellaneous | 339 | 19,761 | 4.9 | 0.6 | 82.9 | 11.4 | 0.3 |
| Medical equipment and supplies | 3391 | 7,588 | 6.7 | 0.6 | 78.7 | 13.9 | 0.1 r |
| Other miscellaneous manufacturing | 3399 | 12,172 | 3.7 | 0.6 | 85.5 | 9.8 | 0.4 r |
| Nonmanufacturing industries | 11, 21-23, 42-81 | 4,651,784 | 0.7 | 0.3 | 86.0 | 12.8 | 0.3 |

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| Agriculture, forestry, fishing, and hunting | 11 | 21,859 | 0.2 r | 0.0 | 87.9 | 11.8 | 0.0 |
| Mining, extraction, and support activities | 21 | 15,323 | 0.5 | 0.4 r | 86.0 | 12.9 | 0.3 r |
| Utilities | 22 | 2,729 | 0.5 | 0.5 | 89.4 | 9.4 | 0.3 r |
| Construction | 23 | 627,170 | 0.4 | 0.1 | 87.0 | 12.2 | 0.3 |
| Wholesale trade | 42 | 246,019 | 1.5 | 0.5 | 85.2 | 12.4 | 0.4 |
| Retail trade | 44-45 | 548,126 | 0.7 | 0.2 | 85.3 | 13.7 | 0.2 |
| Transportation and warehousing | 48-49 | 160,599 | 0.2 | 0.2 | 85.2 | 13.9 | 0.5 |
| Information | 51 | 63,631 | 1.1 | 0.8 | 88.3 | 9.6 | 0.2 |
| Publishing | 511 | 17,644 | 1.4 | 0.4 | 88.2 | 9.7 | 0.2 |
| Newspaper, periodical, book, and directory publishers | 5111 | 9,186 | 0.1 | 0.1 r | 90.0 | 9.7 | 0.1 |
| Software publishers | 5112 | 8,459 | 2.8 | 0.8 | 86.3 | 9.8 | 0.3 |
| Telecommunications | 517 | 7,670 | 0.5 r | 0.2 | 85.6 | 13.4 | 0.3 r |
| Data processing, hosting, and related services | 518 | 8,311 | 0.8 | 1.4 r | 89.9 | 7.6 | 0.3 |
| Other information | other 51 | 30,006 | 1.2 | 1.0 | 88.5 | 9.0 | 0.2 |
| Finance and insurance | 52 | 198,294 | 0.4 | 0.2 | 84.0 | 15.2 | 0.2 |
| Real estate and rental and leasing | 53 | 272,733 | 0.2 | 0.1 | 85.3 | 14.2 | 0.2 |
| Lessors of nonfinancial intangible assets (except copyrighted works) | 533 | 1,581 | 0.0 | 4.0 r | 90.1 | 5.9 r | 0.0 |
| Other real estate and rental and leasing | other 53 | 271,153 | 0.2 | 0.1 | 85.3 | 14.2 | 0.2 |
| Professional, scientific, and technical services | 54 | 709,564 | 1.3 | 0.5 | 88.7 | 9.1 | 0.3 |
| Legal services | 5411 | 153,271 | 0.1 r | 0.1 r | 89.3 | 10.1 | 0.4 |
| Accounting, tax preparation, bookkeeping, and payroll services | 5412 | 106,909 | 0.2 | 0.2 | 88.8 | 10.3 | 0.4 |
| Architectural, engineering, and related services | 5413 | 88,331 | 5.1 | 0.9 | 85.9 | 7.7 | 0.4 |
| Specialized design services | 5414 | 29,243 | 1.6 | 0.1 r | 90.8 | 7.5 | 0.0 |
| Computer systems design and related services | 5415 | 98,634 | 1.7 | 1.5 | 87.5 | 8.8 | 0.5 |
| Management, scientific, and technical consulting services | 5416 | 139,202 | 0.8 | 0.3 | 90.3 | 8.4 | 0.2 |
| Scientific research and development services | 5417 | 10,785 | 6.1 | 2.5 | 81.6 | 9.1 | 0.7 |
| Advertising, public relations, and related services | 5418 | 27,701 | 0.7 | 0.3 r | 90.3 | 8.7 | 0.1 r |
| Other professional, scientific, and technical services | 5419 | 55,490 | 0.6 | 0.2 r | 89.0 | 9.8 | 0.3 |
| Management of companies and enterprises | 55 | 2,331 | 0.0 | 0.0 | 85.6 | 14.4 | 0.0 |
| Administrative and support and waste management and remediation services | 56 | 291,891 | 0.4 | 0.3 | 87.8 | 11.3 | 0.2 |
| Educational services | 61 | 56,639 | 0.7 | 0.2 r | 88.9 | 10.1 | 0.1 r |
| Health care and social assistance | 62 | 531,069 | 0.8 | 0.2 | 86.2 | 12.6 | 0.3 |
| Health care services | 621-23 | 466,688 | 0.9 | 0.2 | 86.5 | 12.2 | 0.3 |
| Social assistance | 624 | 64,382 | 0.1 r | 0.2 r | 83.6 | 15.7 | 0.4 |

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| Arts, entertainment, and recreation | 71 | 90,143 | 0.6 | 0.4 | 86.5 | 12.2 | 0.2 |
| Accommodation and food services | 72 | 464,142 | 0.3 | 0.2 | 82.6 | 16.6 | 0.3 |
| Other services | 81 | 349,519 | 0.5 | 0.3 | 84.5 | 14.4 | 0.3 |

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail across rows may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Detail across columns have been adjusted to add to total. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2021 Annual Business Survey: Data Year 2020.